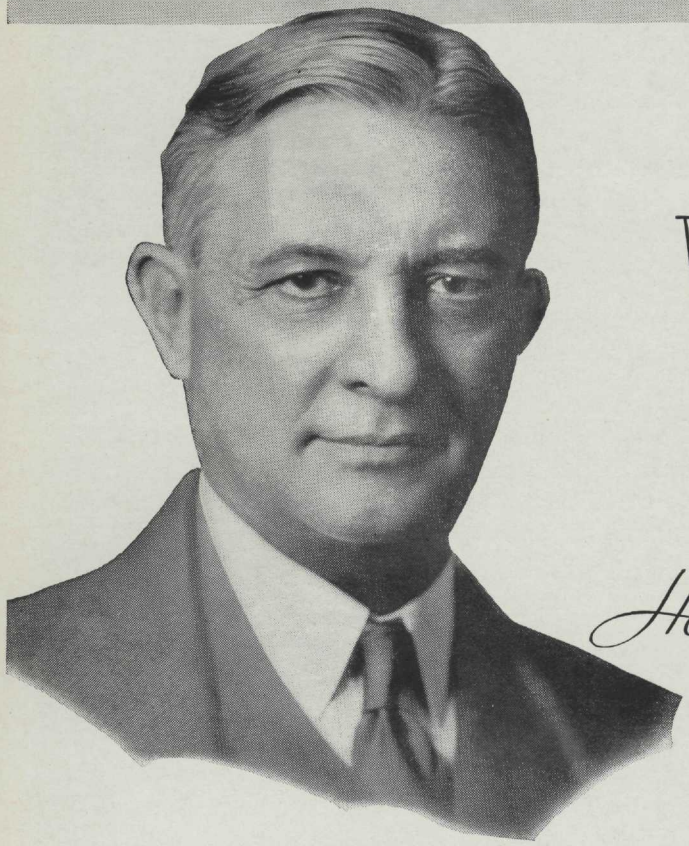
CAREERS OF CARRIER ENGINEERS



WILLIS H. CARRIER... ENGINEER

He Established the Art of Air Conditioning

AS an undergraduate at Cornell, Willis H. Carrier dreamed of the science now known as air conditioning. And in 1902, within a year after graduation, his dreams had become realities—through his installation of equipment to control troublesome humidity and temperature in a Brooklyn lithography plant.

Years passed—years devoted to experimentation, to designing new equipment, and developing new methods of installation. Then, in 1911 Mr. Carrier disclosed his now-famous Rational Psychrometric Formulae to the American Society of Mechanical Engineers—and *true* air conditioning was born.

Overnight, a new industry came into being—an industry spreading health and prosperity throughout the world—and opening new and unlimited opportunities for engineers. And these opportunities have steadily increased—just as the demand for air conditioning itself has steadily increased. New men, *young* men are needed — men with the vision, the determination, and the ability to study and carry on the principles established by Willis H. Carrier and his pioneering associates.

To such men Carrier offers a wide variety of careers—ranging from laboratory research, machine design, sales and installation, to work in the far corners of the earth—the 99 countries of the world which today know the benefits of Carrier Air Conditioning. Youth is welcomed at Carrier, its capabilities fostered—the young engineer gains recognition in keeping with his accomplishments—not with age alone—for Carrier realizes that its future development, its future expansion depends upon its engineers.

During this year, Carrier has trained 300 recent graduates from leading engineering schools in every section of the country. Carrier needs more men. If you had a good school record, and are interested in the world's most fascinating, fastest-growing industry, write us.

Carrier
Air Conditioning

CARRIER CORPORATION, SYRACUSE, N. Y.

AN ORGANIZATION OF ENGINEERS

G-E Campus News

A 40-MILE-AN-HOUR MINE HOIST

The problem of hauling a 25-ton load up a steep mine shaft at a speed of 3,600 feet per minute, or approximately 41 miles an hour, was recently undertaken by the General Electric Company for a Southeastern coal company. Upon completion, this mine hoist will be the largest and fastest in this country.

More than 6000 feet of wire rope wound around an 18-foot drum will hoist an unbalanced load of 50,800 pounds to the surface. The driving power for this tremendous weight will be a 2500-hp G-E hoist motor with dynamic braking as a safety factor to reduce the speed when men are being carried.

For the last 40 years the General Electric Company has been engaged in the manufacture of electric mining equipment. Much of the new design and development in this field has been contributed by college-trained men who were on Test.

FLOODLIGHTING DAVY JONES' LOCKER

When Capt. John D. Craig, deep-sea diver and photographer, descends to the black depths of the Irish Channel to photograph the salvage operations of the Lusitania, Davy Jones' Locker will be floodlighted for the first time in history.

The hulk of the ill-fated Lusitania lies buried in shifting sand at a depth of approximately 300 feet, with a treasure in her coffers valued at between $4,000,000 and $15,000,000. To illuminate the wreck for filming, the General Electric Laboratories in Nela Park, Cleveland, Ohio developed a 5000-watt lamp, built to withstand a pressure of 500 pounds to the square inch—more than three times the pressure believed to be around the vessel. Capt. Craig will use a battery of 12 of these lamps mounted on a submarine stage to floodlight the inky depths.

So widespread are the uses of electricity that the development of an underwater lamp merely illustrates the problems encountered by G-E engineers. Many of these men were on the college campus but a few years ago.

MODERN LILLIPUT

Wire, three thousandths of an inch in diameter, flattened between two polished rollers to a thickness of nine ten-thousandths of an inch; pivots ground to a point and then rounded to a radius half the diameter of a human hair, yet still sharper than the sharpest needle; sapphires not as large as the head of a pin. Such Lilliputian parts are to be found in the West Lynn plant of the General Electric Company.

A pivot with a point two thousandths of an inch in diameter, yet it supports a pressure of many thousands of pounds to the square inch. Hundreds of such parts are assembled to produce instruments—instruments that measure small flows of current, great flows of current, light, sound, vibration, strain, and time. These instruments are so sensitive that they measure the smallest quantities, yet sturdy enough to withstand the severe vibrations of a locomotive cab or an airplane dashboard.

The design and manufacture of precision instruments is but one of the many fields which are open to technically trained men in the General Electric Company.

GENERAL ELECTRIC

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